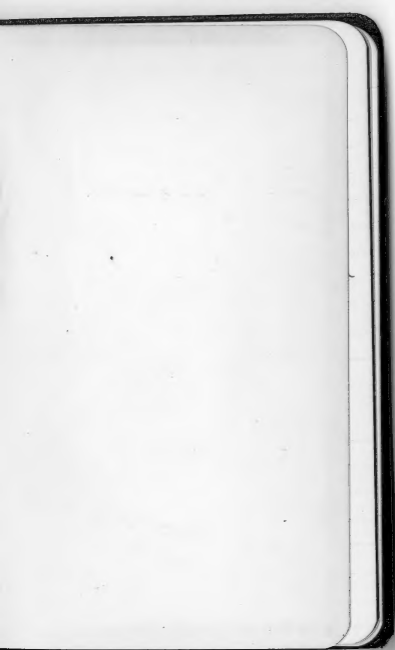
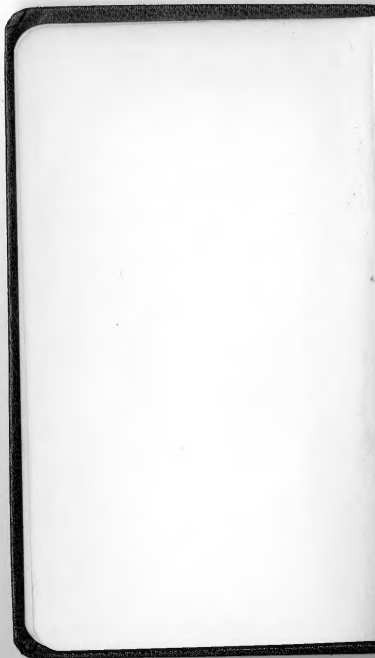


14739-15744

John Thomas Howell.





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ed



June 16, 1939.

Skyline Blvd. 4 miles w. of  
Burlingame on Shiley cut.,  
San Mateo Co.

14739. *Cirsium*

Perennial from rootstocks,  
flowers white at first, becoming  
sordid. Anthers lavender striped  
at first. Flowers spreading in  
anthesis.

Serpentine near San Andreas  
Lake, San Mateo Co.

14740. *Cirsium*

Similar to preceding. The leaves  
tomentose beneath and the bracts  
scarious-margined.

June 16, 1939.

Skyline Boulevard near Crystal  
Spring Lake, San Mateo Co.

14741. *Carduus*

Only 1 plant seen.

14742. *Eryngium armatum*

First brooklet n. of Causeway  
across Crystal Spring Lake on  
Skyline Blvd. on east side of lake,  
in Serpentine.

14743. *Cirsium fontinale*

Biennial. Involucral bracts  
commonly purplish-tinged. Flowers  
spreading a little. Corolla white or  
very faintly tinged with lavender.  
Anthers the same or decidedly  
lavender. - Heads nodding. Plants  
widely branching, 3-4 ft. tall.

June 16, 1939.

14744. *Helenium puterulum*  
Heads very small.

14745. *Verbena robusta*

14746. *Cirsium*

Growing in dry clay soil a couple of yards from *C. fontinale*. In habit very different - in this 10 stems spread from a central point, stout, about  $2\frac{1}{2}$  ft. long. Flowers spreading a little, corolla white anthers pale lavender, the whole becoming soiled. The involucral bracts greener & larger than in *C. fontinale*. Maybe hybrid between *C. fontinale* & the type of *C. quercetorum* (?) common in the vicinity. In this plant there was nothing to indicate it a perennial. Heads not nodding.

June 16, 1939.

Kings Mt., San Mateo Co.

14747. *Cisium occidentale*

Biennial or winter annual. Outer  
flowers slightly spreading. Flowers  
rose-red.

14748. *Placelia involucrata*

Corolla tubular at first, subcampan-  
ulate, the lobes turned in later,  
white at first.

14749. *Placelia californica*

Not growing with preceding. Corolla  
narrowly campanulate, the lobes  
not spreading, pale lavender at  
first.

Skyline Blvd. near Saratoga Gap.

Santa Clara Co.

14750. *Ceanothus americanus*

June 16, 1939.

var. nov.

14751. *Ceanothus cuneatus dubius*,  
Prood shrub 5-8 ft. tall with  
arching branches. Foliage only a  
little shiny above.

14752. *Eriophyllum confertiflorum*

Skyline Blvd. near Saratoga Gap,  
Santa Cruz Co.

14753. *Phacelia menziesii*  
var. *menziesii* -

14754. *Ribes Menziesii*

14755. *Phacelia imbricata*  
*ssp. imbricata*  
Culm. Tubular - campanulate,  
white, the lobes turning in later.

14756. *Ceanothus cuneatus dubius*  
Similar to 14751 but elongate  
growing shoots prominent.

June 16, 1939.

Ben Lomond sand hills,  
Santa Cruz Co.

14757. *Carex globosa*

14758. *Carex brevisculis*

14759A. *Reich. chytzia hypacoides*

14759. *Scutellaria tuberosa*

14760. *Eupatorium tentifolium*

14761. *Asclepias speciosa*?

14762. *Chorizanthe diffusa*

14763. *Mandevilla subserata*

14764. *Silene versicolor*

14765. *Cirsium occidentale*

Flowers red, straight, not spreading.

14766. *Ceanothus cuneatus* dubius  
When well developed, a broad  
much-branched shrub, as broad as  
broader than tall, up to 10 ft. tall.  
growing with *Pinus ponderosa*, *P. attenuata*,  
*Arctostaphylos silvicola*, *Eucameria*  
*ericoides*. Ben Leonard, Santa Cruz  
Co. June 16, 1939.

Near Mud Lake n. of Bolinas,  
Marin Co. June 18, 1939.

14767. *Conthogyne californica*

14768. *Eriogonum cuneatum*

14769. *Shepherdia*

14770. *Eriodactylon*

14771. *Graptolium californicum*

June 18, 1939.

Near Mud Lake n. of Bolinas,  
Marin Co.

14772. *Lupinus nevadensis*,  
Flowers lavender-blue. Low  
shrubby plant about 2 ft. tall.
14773. *Angelica Tomentosa*
14774. *Cirsium quercetorum*  
Stems from underground rootstock.  
Flowers white at first, opening a  
little.
14775. *Allocaarya*
14776. *Salvia davenportii*
14777. *Madia*
14778. *Grindelia robusta*

June 18, 1939.

14779. *Lupinus chamissonis*  
Flowers dark purplish-blue. Shubby  
plant about 2 ft. tall.

14780. *Festuca rubra*

14781. *Agrostis diegoensis*

14782. *Agrostis diegoensis*

14783. *Candollea*

14784. *Ribes divaricatum*

14785. *Polypogon luteus*

14786. *Koeleria cristata*

14787. *Lupinus formosus*

Stems low & spreading. Flowers dark  
purplish-blue

Campus, Univ. of California, Berkeley.

June 20, 1939.

14788. *Crepis bursifolia*

Common on site of old Harmon Gym.

14789. *Cotula australis*

Unusually villous aspect.

Ridge n. of Mill Valley Station  
near Miss Eastwood's old place,  
Marin Co. June 25, 1939.

14790. *Cirsium occidentale* var?

Flowers spreading some, lilac in  
color. Growing on partially shaded  
bank in stony soil.

14791. *Monardella*

14792. *Lupinus formosus*

Corolla lavender-blue, early becoming  
aridid.

June 25, 1939.

14793. Rumex *salicifolius*

14794. Eriogonum *multum*

14795. *Cirsium ventrifolium* <sup>odontolepis</sup> var.

Outer bracts broad & spiny-margined.  
Topotype!

14796. *Cirsium ventrifolium* <sup>quercetorum</sup> x

Bracts with much narrower margin  
that is scarcely spiny.

14797. *Cirsium ventrifolium* <sup>quercetorum</sup> x

Bracts entire and spine-tipped

14798. *Cirsium ventrifolium* <sup>quercetorum</sup> x

Bracts shaped like those of preceding  
but somewhat spiny-margined.

14799. *Cirsium amblygaster* <sup>californicum</sup>

Some bracts broad, some bracts slender,  
some entire, some spiny-toothed!

June 25, 1939.

The Thistles that have just been listed are growing near each other along the east slope of the ridge north of Mill Valley Station just below the beginning of the chaparral belt on Mt. Tamalpais.

They are not far from the old property owned formerly by Miss Eastwood, on which place variants corresponding to those collected were seen. No. 14795 resembles the

type of C. remotifolium var.

odontolepis Petrak & No. 14799

approaches the type of C. ambly-  
lepis Petrak. Acc. to the labels

they came from "Mt. Tamalpais" but Miss Eastwood has told me

that C. amblylepis grew on her place and it may be that that is

the type locality. — All the forms grew from rootstocks & had

June 25, 1939.

sordid white to ~~tan~~<sup>buff</sup> flowers which spread a little in the bud.

14800. *Cirsium occidentale* var.?

Flowers ray-red, spreading a little in anthesis. Plants with tap-root.

14801. *Cirsium occidentale* x *quercetum*

This may be a hybrid between the preceding (which is like the usual widespread "*C. occidentale*" of the south side of Mt. Injalpuris) and the *C. quercetum* type of which No. 14797 is a representative in this neighborhood. The root is apparently that of a biennial. The flowers are sordid - buff or - whitish.

14802. *Chrysopsis Blandiana*

14803. *Symphoricarpos*.

June 25, 1939.

Ridge n. of Mill Valley Station,  
Marin Co.

14804. *Brassica graveolens*  
The commonest weedy roadside  
mustard at this season.

South side of Mt. Inualpaia above  
Cascade Canyon, Marin Co.

14805. *Phalaris minor*

14806. *Lupinus fallax*

14807. *Rubus parviflorus*

14808. *Mimodella*

14809. *Mothia*

glandular secretion with small  
of black warts.

June 25, 1939.

Wet place near West Point,  
Mt. Diablo, Marin Co.

14810. *Agrostis* sp.

Azalea Flat, Mt. Diablo

14811. *Cicuta californica*

Cascade Canyon, Mill Valley.

14812. *Polygonum aviculare* <sup>var. strictum</sup>

Stems erect, or the lowest ones  
spreading a little or prostrate.

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14813. *Polygonum aviculare* var. *littorale*

Borders of Alameda salt marsh, Marin  
Co. July 2, 1939. Stems all prostrate,

herbage more or less glaucous blue-grey.  
Stamens 8; achenes with roughenings  
more or less aligned longitudinally.

July 2, 1939.

14814. *Polygonum aviculare* var. *sectum*.

First stem erect, the lowest  
branches spreading or procumbent,  
herbage yellowish-green. Stems  
8. Leaves markedly striate.  
With preceding.

14815. *Eriogonum latifolium*.

Hills sw. of Almonte, Marin Co.

14816. *Arctostaphylos*

With preceding. — — —

Elk Valley, Marin Co.

14817. *Hypericum anagalloides*

14818. *Cirsium Andrewsii*

Evidently biennial, very robust,  
up to 6 ft. tall, the main stem up  
to 3 in. in diameter, the large  
plants much-branched from near

July 2, 1939.

base. Flowers spreading, corolla  
rosy-purple, anthers rosy-lavender.

14814. *Cirsium quercetorum*

Stems from perennial crown.  
Flowers orchid-whiteish, anthers  
lavender-striped.

14820. *Mimulus* \_\_\_\_\_

14821. *Epilobium panicum*

14822. *Epilobium adpressum*

14823. *Glyceria leptostachya*

In wet spring place with preceding.

14824. *Horkelia californica*

Common on bushy slopes forming  
low herbaceous clumps.

14824A. *Hudleya coarctata*

Stems & lvs. lightly glaucous

July 2, 1939.

Ridge between Tennessee Cove  
& Pirates Cove, Marin Co.

14825. *Erigeron latifolius*

14826. *Castilleja*

Floral bracts yellow to coral.

14827. *Graptolium californicum*

Stems and leaves glandular &  
odorous, no tomentum.

14828. *Graptolium californicum* -

Stems & leaves tomentose, no  
glands present.

14829. *Graptolium californicum*

Stems arachnoid-tomentose,  
the leaves glandular above and  
thickly tomentose. - May be a hybrid  
between two preceding.

July 2, 1939.

14830. *Grindelia hirsutula*  
Rays 28, 29, 38.

14831. *Chrysopsis Bolanderi*.

14832. *Lupinus nanus*  
Common, 2-4 ft. tall, generally  
 $2\frac{1}{2}$  ft. tall.

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Piute's Cove, Marin Co.

14833. *Helianthus puberulus*

14833A. *Senecio caespitosus*

Leaves glabrous, inflorescence a little glaucous.

Between Piute's Cove + Big Lagoon,  
Marin Co.

14834. *Grindelia rubra*  
Rays 25, 34, 32.

14835. *Anaphalis margaritacea*  
var. *occidentalis*

14836. *Monardella*

July 2, 1939.

Between Big Lagoon and  
Min Woods, Marin Co.

14837. *Mimulus*

14838. *Cornus californica*

14839. *Juncus xiphioides*

14840. *Madia*

Herbage not bad smelling, somewhat like black-walnut.

14841. *Eriogonum fasciculatum*

Stems glabrous.

14842. *Epilobium californicum*

Just south of Min Woods,  
Marin Co.

14843. *Hypericum perforatum*

Two small patches.

14844.

Only 1 plant seen.

14845. *Silene* *Hansenii*

Forming a small patch.

Mill Valley, Marin Co.

July 2, 1939.

14846. *Brassica* *geminata*

Stems 6-8 ft. tall.

Azuleo Flat, Mt. Tamalpais,

July 16, 1939.

14847. *Hebe* *Nickersonii*

14848. *Juncus* *xiphioides*

14849. *Juncus* *effusus*

Red Trail, Mt. Tamalpais. July 16-1939

14850. *Scrophularia*

Plant 10 ft. tall!

Rock Spring, Mt. Tavalpais.  
July 16, 1939.

14851. *Juncus phaecephalus* var.  
*penicillatus*

14852. *Juncus Covillei*

14853. *Juncus Bolanderi*

Between Mt. Theater & Baldyock,  
Mt. Tavalpais, July 16, 1939.

14854. *Grindelia* ~~*radicalis*~~  
Rays 29 in 1 head

Summit of Scott Mts. on road n. of  
Carrville, Trinity Co. July 31, 1939.

14855. *Rubus parviflorus*

14856. *Gentiana calycosa*

14857. *Rosa praeconpa*.

north side of Scott Mts. on road to  
Cullaghan, Siskiyou Co. July 31, 1939.

14858. *Pyrocoma* - *Aphropappus*  
*roseus* var. *pusillus* (Keck, Howell)  
Scott Valley near Ft. Jones,  
Siskiyou Co. July 31, 1939.

14859. *Ceanothus cuneatus*

Spirit Lake, Marble Mts.,  
Siskiyou Co. Aug. 2, 1939.

14860. *Helenium* *Hoopesii*

14861. *Castilleja miniata*

14862. *Polygonum minimum*

14863. *Heuchera Merriami*

14864. *Penstemon Berryi*

14865. *Garrya Fremontii*

Aug. 2, 1939.

Spirit Lake, Marble Mts.,  
Siskiyou Co.

14866. *Spraguea umbellata* ?

14867. *Cepis acuminata* .

14868. *Epilobium alpinum*

14869. *Eriogonum compositum*

14870. *Saxifraga hypnoides*

14871. *Vaccinium membranaceum*

14872. *Lutkea pectinata*

14873. *Anemone Drummondii* ?

14874. *Pellaea Breweri* .

14875. *Angelica thurberii*

Aug. 2, 1939.

14876. *Ribes Marshallii*

14877. *Aster foliaceus* var.

14878. *Aster* - *Encyphorus*  
*globatus*.

14879. *Eriogon salicifolius*

14880. *Quercus vaccinifolia*

14881. *Quercus Sadleriana*

14882. *Phacelia* ?  
Corolla campanulate.

14883. *Erysimum capitatum*

14884. *Holidiscus discolor*

14885. *Eriogonum elatum*

Aug. 2, 1939.

Spirit Lake, Marble Mts.,

Siskiyou Co.

14886. *Gayophytum ramosissimum*

14887. *Eriogonum umbellatum*

14888. *Ligusticum Howellii*

14889. *Eriogonum nudum*

14890. *Eriophyllum laetum*  
var. *integrifolium*

14891. *Streptanthus tortuosus*

14892. *Isotles Bolanderi*.

Submerged aquatic.

14893. *Eupatorium occidentale*

14894. *Erigeron inornatus*

Aug. 2, 1939.

14895. *Hieracium albiflorum*.

14896. *Fritillaria atropurpurea*

14897. *Polygonum Havisi*

14898. *Gilia aggregata*

14899. *Penstemon azureus*.

14900. *Picea*

14901. *Penstemon angusticus*

14902. *Pellaea densa*

14903. *Potentilla Breweri*

14904. *Antennaria racemosa*

14905. *Gomphania obtusata*

Aug. 2, 1939.

Spirit Lake, Marble Mts.,  
Siskiyou Co.

14906. *Potentilla Drummondii*

14907. *Carex Preslii*

14908. *Carex stramineiformis*.

14909. *Arnica latifolia*

14910. *Arnica latifolia*

14911. *Leptotaenia dissecta*

14912. *Poa gracillima*

14913. *Arabis secunda*.

14914. *Lomatium macrocarpum*

14915. *Sanicula septentrionalis*

Aug. 2, 1939.

- 14916. *Arenaria congesta*
- 14916a. *Arenaria capillaris*
- 14917. *Arnica*
- 14918. *Quercus garryana* *Breweri*
- 14919. *Amelanchier alnifolia*
- 14920. *Hieracium Bobcockii*
- 14921. *Pyrola secunda*
- 14922. *Linetum cuneatum* ?
- 14923. *Ribes*
- 14924. *Osmorhiza nuda*
- 14925. *Symphoricarpos mollis*
- 14926. *Osmorhiza occidentalis*

Aug. 2, 1939.

Spirit Lake, Mable Mts.,  
Siskiyou Co.

14927. *Anemone deltoidea*

14928. *Lonicera conjugialis*

14929. *Sidalcea oregana*

14930. *Bromus carinatus*.

14931. *Potentilla gracilis*

14932. *Bromus Suksdorfii*?

14933. *Monardella odoratissima*

14934. *Carex abrupta*.

14935. *Aira elongata*.

14936. *Carex Hoodii*

Aug. 2, 1939.

- 14937. *Rubus parviflorus*
- 14938. *Elymus glaucus*.
- 14939. *Polygonum longifolium*
- 14940. *Potentilla glandulosa*
- 14941. *Arabis suffrutescens*.
- 14942. *Calamagrostis Koelerioides*
- 14943. *Agrostis diegoensis*.
- 14944. *Gazophytum lasiospermum*
- 14945. *Arabis Drummondii*.
- 14946. *Gilia capitata*
- 14947. *Symphoricarpos mollis*

Aug. 3, 1939.

Spirit Lake, Marble Mts.,  
Siskiyou Co.

14948. *Allium validum*

14949. *Lilium nevadense*

14950. *Decadanthem jeffreyi*.

14951. *Padicularis racemosa*

14952. *Arabis retrofracta*

14953. *Melica subulata*

14954. *Lewisia cotyledon*

14955. *Gormania obtusata*

14956. *Alnus sinuata*

14957. *Actaea arguta*

Aug. 3, 1939.

14958. *Ribes binominatum*

14959. *Veronica alpina* var.  
*malacochensis*

14960. *Carex Kelloggii*

14961. *Epilobium brevistylum*

14962. *Carex abrupta*.

14963. *Carex leptopoda* (Leachku)

14964. *Carex laeviculmis*.

14965. *Mitella pentandra*

14966. *Stellaria crisp.*

14967. *Viola blanda*

14968. *Carex ableta*

Aug. 3, 1939.

Spirit Lake, Siskiyou Co.,  
Marble Mts.

14869. *Stachys rigida*

14970. *Galium triflorum*

14971. *Silene campanulata* var  
*greenii*.

14972. *Silene campanulata* var. *greenii*.  
Petal cinereous - pubescent.

14973. *Chelone nanosa*

14974. *Tellima grandiflora*

14975. *Filix fragilis*

14976. *Polygonum alpinum*

14977. *Mitella trifida*

Aug. 3, 1939.

14978. *Cornus stolonifera*

14979. *Sorbus californica*

14980. *Hackelia floribunda*

14981. *Ceanothus Gairdneri*

14982. *Circaea pacifica*

14983. *Kelloggia galioides*

14984. *Junco ensifolius*

14985. *Schoenolirion album*.

14986. *Prunus emarginata*

14987. *Boykinia major*

14988. *Athyrium filix-femina*

Aug. 3, 1939.

Spirit Lake, Marble Mts.,  
Siskiyou Co.

14989. *Carex leptopoda*.

14990. *Saxifraga fragarioides*

14991. *Polystichum lonchites*,

14992. *Streptopus amplexifolius*

14993. *Cardamine Lyallii*

14994. *Minulus moschatrus*.

14995. *Cheilanthes gracillima*

14996. *Apocynum androsaemifolium*  
var. *pumilum*

14997. *Minulus nephriticus*  
*leptolepis*

14998. *Eriogonum nevadensis*

Aug. 3, 1939.

14999. *Trisetum spicatum*  
15000. *Luzula parviflora*.  
15001. *Agrostis Thurberiana*.  
15002. *Carex integra*  
15003. *Hesperomysia atropurpurea*  
15004. *Carex abrupta*.  
15005. *Juncus confusus*.  
15006. *Cryptogramma acrostichoides*  
15007. *Carex brevipes*  
15008. *Carex Brainerdii*  
15009. *Juncus Parryi*.

Aug. 3, 1939.

Spirit Lake, Marble Mts.,  
Siskiyou Co. \_\_\_\_\_

15010. *Pedicularis bracteosa*

15011. *Sambucus racemosa*

15012. *Montia asarifolia* /

15013. *Smilacina amplexicaulis*

15014. *Habenaria leucostachys*

15015. *Clintonia uniflora*

15016. *Ceanothus velutinus*

15017. *Valeriana anomala* n. sp.

15018. *Veratrum viride*

15019. *Phacelia procera*

Aug. 3, 1939.

15020. *Trillium rivale*

15021. *Anastrophylis patula* var

15022. *Aquilegia formosa*

15023. *Senecio trigonophyllus*

15024. *Senecio trigonophyllus*

Involucres fleshy - thickened at  
base; achenes larger than in  
preceding.

15025. *Castilleja pruinosa*.

15026. *Castilleja globosa*

Inflorences less cinereous and  
more glandular.

Aug. 4, 1939.

Between Elk Mt. and Marble Rim,  
Marble Mts., Siskiyou Co.  
(Marble Rim is escarpment south of  
Rainey Valley.)

15027. *Chasmodium alvirens*.

15028. *Chorobanche fasciculata*  
Apparently on *Eriogonum umbellatum*.

15029. *Prunus emarginata*  
Lvs. unusually broad.

15030. *Agoseris plebeia*  
Ligules bronzy.

15031. *Lupinus albus*  
Fls. lavender at first, very  
quickly turning brown.

15032. *Lupinus albus*

Aug. 4, 1939.

15033. *Cirsium*

Plants seeming to be perennial from deep-seated tap-root. Fls. sordid whitish.

15034. *Orthocarpus Copelandii*.

15035. *Polygonum spargulosum*

15036. *Rosa gymnocarpa*.

Marble Rim se. ridge of Rainey Valley, Marble Mts., Siskiyou Co.

15037. *Castilleja pinetorum*?

15038. *Draba pterospema*

15039. *Lupinus lepidus* var.  
*artus*.

15040. *Menandella odoratissima*

Aug. 4, 1939.

Marble Rim, Marble Mt.,  
Siackin Co.

15041. *Crepis acuminata*.

15042. *Phacelia*

Distinctly perennial, forming  
broad leafy mats or cushions  
from which flowering stems  
arise. The mats may be as much  
as 2 ft. across. Fls. candid-  
whitish, open-composite.

15043. *Castilleja schizotricha*.  
Inflorescence lavender-tinted.

15044. *Buckellia grandiflora*  
Numerous stems from perennial  
base.

15045. *Aster* - *Machaeranthera*  
*eradiata*

Aug. 4, 1939.

15046. *Campanula rotundifolia*

15047. *Gilia congesta*.

15048. *Arabis canescens*?

15049. *Chrysopsis villosa*

15050. *Sedum strepetalum*

15051. *Prunus demissa*

15052. *Eriogonum Blomeri*

15053. *Lesquerella occidentalis*

15054. *Antennaria arbuscula*.

15055. *Astragalus Purshii*

Aug. 4, 1939.

Near Spirit Lake on trail between  
Spirit Lake & Elk Mt., Marble Mts.,  
Siskiyou Co.

15056. *Pachystima myrsinites*

15057. *Ribes Lobbii*

15058. *Castilleja excelsa* Eastw. n. sp.  
The deep rich red & green of the  
inflorescence very striking.

15059. *Castilleja muscipula argentea*  
n. var.  
Leaves narrow, inflorescence  
orange-red.

15060. *Castilleja muscipula* n. sp.  
Leaves broader, —

15061. *Castilleja muscipula arizonica*  
n. var.  
Intermediate between 15058 &  
15059.

Aug. 5, 1939.

Spirit Lake, Marble Mts.,  
Siskiyou Co.

15062. *Mertensia parvifolia*

15063. *Juncus Mertensianus*

15064. *Radiola sinuata*

15065. *Viola (blanda) Macloskeyi*.

15066. *Carex multicastrata*

15067. *Bromus Ecksdorfii*?

15068. *Chimaphila umbellata*

15069. *Acer glabrum*

I examined hundreds of specimens  
in the higher Marbles and not  
one carried fruit. In middle part  
of canyon of Canyon Creek 1 specimen with  
fruit was seen.

Aug. 5, 1939.

Spirit Lake, Marble Mts.,  
Siskiyou Co.

15070. *Stenanthium occidentale*.

1 Perianth-segments yellowish-  
green, maroon in margin.

15071. *Glyceria elata*

15072. *Sambucus glauca*

15073. *Pyrola picta*

15074. *Aconitum* [ *A. vancouvericum* Greene. var. ] *var. vancouvericum*

Bulblet-bearing in axils. Some  
plants produce no flowers - only  
bulblets.

15075. *Delphinium glaucum*

15076. *Hemizonia americana*.

Aug. 5, 1939.

15077. *Salix commutata* ♂  
var. *puberula*
15078. *Salix commutata* ♀  
var. *puberula*
15079. *Salix Coulteri* ♂
15080. *Salix Coulteri* ♀
15081. *Salix Scouleriana*
15082. *Carex microptera* (Lischke)
15083. *Hypoxis anagalloides*
15084. *Corallorhiza maculata*
15085. *Corallorhiza Mertensiana*
15086. *Corallorhiza*

Sepals brownish, each spurred, alternating with 3 almost similar petals,

the lip slightly broader than  
the two laterals, all the petals  
rosy-purple with white tip.  
The sepals tending to be erect, the  
petals spreading.

Spirit Lake, Monble Mts.,  
Siskiyou Co. Aug. 6, 1939.

15087. *Stipa occidentalis*

15088. *Arabis glabra*

15089. *Chimaphila Menziesii*

15090. *Hedeacanthus Jeffreysii*.

15091. *Hieracium lanatum*

15092. *Agastache utrifolia*

15093. *Achillea lanulosa*.

Aug. 6, 1939.

15094. *Cinna latifolia*.  
15094A. *Polygonum Haysii*  
Elk Park, Marble Mts.,  
Siskiyou Co.  
15095. *Stipa Lettermannii*.  
15096. *Boechneria strobilacea*  
15097. *Hieracium Blandieri*.  
15098. *Amelanchier alnifolia*  
15099. *Carex Brewsterii*  
15100. *Chaetanthes gracillima*  
15101. *Eriogonum Brevieri*.  
15102. *Hieracium albiflorum*.  
Flowers seem to be pale but  
all are faded.  
15102A. *Salix Scouleriana*

Aug. 6, 1939.

Near top of Elk Peak, Marble Mts.,  
Siskiyou Co.

15103. *Silene grayi*.

15104. *Luina hypoleuca* var  
*californica*

15105. *Chrysanthemum navesanum*  
*occidentalis*.

15106. *Holodiscus discolor* var.

15107. *Sitanion Hystrix*.

15108. *Carex stramineiformis*.

15109. *Vaccinium Myrtillus*

15110. *Phacelia* ~~2611~~ *2611* *2611*

Perennial facing lifted note.

15111. *Phyllodoce*  
*Bryanthus empetrum*

Aug. 7, 1939.

Sky High Valley, Marble Mts.,  
Siskiyou Co.

15112. *Cirsium*

15113. *Lupinus elongatus*.

15114. *Lilium nevadense*

15115. *Lupinus albus*.

15116. *Carex Preslii*

15117. *Coronilla Howardii*

15118. *Trifolium Howardii*

15119. *Carex nevada*

15120. *Carex oblata*.

15121. *Carex integra*

Aug. 7, 1939.

Sky High Valley, Marble Mts.,  
Siskiyou Co.

15122. *Sidalcea oregana*.

15123. *Aconitum Howellii*

15124. *Orthocarpus Copelandii*.

15125. *Salix commutata*

15126. *Henthonia intermedia*

15127. *Carex gymnoclada*

15128. *Carex Kelloggii*

15129. *Juncus ensifolius*

15130. *Scirpus Engelmii*

15131. *Salix commutata*  
var. *dendrata*

♂

- 15132 A. *Salix commutata demodata*  
 15132. *Salix commutata* var. ♀  
*demodata*.  
 15133. *Aster adscendens*.  
 15134. *Aster Menziesii*?  
 Plant cinereous - pubescent.  
 15135. *Sesuvio trigonophyllus*.

Between Sky High Valley + Marble  
 Valley, Marble Mts., Siskiyou Co.  
 Aug. 8, 1939.

15136. ~~Lathyrus~~ *Vicia americana*  
 15137. *Arenaria sylvestris*  
 15138. *Eupatorium occidentale*  
 15139. *Carex* " *astrostachya*  
 15140. *Hakelia fusca*.  
 15141. *Gnaphalium obtusata*  
 15142. *Sedum Purdyi*.

Aug. 8, 1939.

Lower eastern slopes of Black  
Mt., Marble Mts., Siskiyou Co.

15143. *Mimulus guttatus*

15144. *Habenaria unalascensis*

15145. *Gentiana*

15146. *Antennaria ludoviciana*

15147. *Antennaria heterophylla*

15148. *Lupinus phoeniceus*

15149. *Saxifraga*

15149A. *Carex stramineiformis*

Subalpine slopes & ridges of Black  
Mt., Marble Mts., Siskiyou Co.

15150. *Senecio trigonophyllus*

15151. *Carex spectabilis*

Aug. 8, 1939.

15152. *Hieracium gracile* var.  
*detraenum*.

15153. *Aquilegia formosa*  
Stems sticky-gummy.

15154. *Juncus nevadensis*

15155. *Carex abrupta*.

15156. *Phacelia* ~~sp.~~  
Perennial.

15157. *Carex Preslii*

15158. *Senecio fremontii*

15159. *Castilleja globosa* Eastw.  
n. sp.

15160. *Lithra pterosperma*

15161. *Ranunculus Eschscholtzii*

Aug. 8, 1939.

Subalpine slopes + ridges of Black  
Mts., Marble Mts., Siskiyou Co.

15162. *Valeriana anomala*  
Corolla pale pink or white.

15163. *Eriogonum calycigenum*.

15164. *Solidago compta*

15165. *Anemone multifida*

15166. *Pinus Balfouriana*

15167. *Antennaria arbuscula*

15168. *Silene Grayi*.

15168A. *Silene Douglasii* monantha

15169. *Eriogonum umbellatum*.

15170. *Lesquerella occidentalis*

15170A. *Sedum stenopectalum*

Aug. 8, 1939.

15171. *Arenaria propinqua*.  
15172. *Potentilla fruticosa*  
15173. *Galium hypotrichum*  
15174. *Arabis retrofracta*?  
15175. *Erytem Blomeri*  
15176. *Geranium triflorum*.  
15177. *Antennaria borealis*  
15178. *Arabis suffruticosa*.  
15179. *Anemone diversifolia*  
15180. *Epilobium anagallidifolium*  
15181. *Arabis Breweri*.

Aug. 8, 1939.

Subalpine slopes & ridges of Block  
Mt., Marble Mts., Siskiyou Co.

15182. *Castilleja schizotricha*

15183. *Antennaria alpina*

15184. *Panstenon procerus*

15185. *Castilleja arachnoides*.  
Inflorescence yellowish, corolla  
canary-yellow.

15186. *Antennaria incompta*  
(*A. discolor* aff.)

15187. *Agoseris alpestris*

15188. *Agoseris glauca* var.  
*laciniata*

15189. *Carex spectabilis*

15190. *Carex abrupta*.

Aug. 9, 1939.

Sky High Valley, Marble Mts.,  
Siskiyou Co.

15191. *Carex exsiccata*.

15192. *Carex abrupta*.

15193. *Arabis Drummondii*

15194. *Isaetes Bolanderi*  
*Amphibious*

15195. *Potamogeton heterophyllus*

15196. *Potamogeton Robbinsii*

15197. *Carex rostrata*.

15198. *Ligusticum Grayi*

15199. *Trisetum cespitosum*.

Aug. 9, 1939.

Sky High Valley, Marble Mt.,  
Siskiyou Co.

15200. *Festuca elatior*

15201. *Trifolium longipes*

15202. *Phacelia* ~~*intermedia*~~ *204*  
*virginica*

15203. *Carex Preslii*

15204. *Glyceria exata*

15205. *Agrostis exarata*

15206. *Salix lasioandra Abramsii*.

15207. *Madia Bolanderi*

15208. *Sparganium angustifolium*

15209. *Populus tremuloide*

Aug. 9, 1939.

15210. *Agrostis diegoensis*.

15211. *Muhlenbergia filiformis*.

15212. *Elymus aristatus*?

15213. *Agrostis diegoensis*.

15214. *Agrostis exarata*

15215. *Gayophytum lasiospermum*

15216. *Gayophytum Nuttallii*

15216 A. *Gayophytum Nuttallii* var. *Abramii*

15217. *Solidago elongata*

15218. *Poa Bolanderi*.

15219. *Carex stramineiformis*

Aug. 9, 1939.

Ridge south of Marble Valley,  
Marble Mts., Siskiyou Co.

15220. *Polemonium pulcherrimum*  
15221. *Castilleja arachnoidea*.  
15222. *Descurainia incisa*  
15223. *Trifolium prostratum*  
15224. *Phleum pratense*.  
15225. *Holcium Fendleri*  
15226. *Carex spectabilis*  
15227. *Athyrium americanum*  
15228. *Luzula parviflora*.  
15229. *Hesperampsis atropurpurea*.

Aug. 9, 1939.

15230. *Potentilla flabellifolia*

15231. *Carex multicaulata*

15232. *Carex spectabilis*

15233. *Phacelia multicaulis*

Shackelford Creek Trail near  
Marble Valley, Marble Mts.

15234. *Solanum Xanthifolium*

15235. *Vicia americana*

15236. *Hazardia Whitneyi* var.

15237. *Epilobium parvicaule*

15238. *Rhamnus Purshiana*

15239. *Collomia tinctoria*

Aug. 9, 1939.

Shockleford Creek Trail near  
Marble Valley, Marble Mts.,  
Siskiyou Co. Aug. 9, 1939.

15240. *Festuca idahoensis*

15241. *Hentaria integrifolia* var.  
*californica*

15242. *Stipa Lemmonii*.

15243. *Apocynum androsaemifolium*  
var. *puberulum*

15244. *Epilobium angustifolium*

15245. *Collinsia grandiflora*

15246. *Aster nodulosus*.

15247. *Gilia capitata*

15248. *Agoseris retrosa*

Aug. 10, 1939.

Sky High Valley, Marble Mt.,  
Siskiyou Co.

15249. *Oraba Humellii*

15250. *Agrostis exarata*.

15251. *Isotetes Bolanderi*.  
Submerged aquatic

15252. *Cinna latifolia*.

15253. *Oxyria digyna*

15254. *Gnaphalium palustre*

15255. *Aster glabratus* (Eucephalus)

15256. *Anemone sylvestris*

15257. *Minulus prunelloides*

Aug. 10, 1939.

Stay High Valley, Marble Mts.,  
Siskiyou Co.

15258. *Gilia capillaris*.

15259. *Minulus rubellus*

15260. *Galium bifolium*

15261. *Epilobium Pringleanum*

15262. *Minulus macrostus*

15263. *Poa leptocoma*?

15264. *Potentilla flabellifolia*

15265. *Decadanthem alpinum*

15266. *Phyllocladus empetriformis*

15267. *Vaccinium membranaceum*

Aug. 10, 1939.

15268. *Romanzoffia itchenis*

15269. *Potentilla*

15270. *Minulus Tilingii*  
Herbage shiny.

15271. *Hydrophyllum Fendleri*

15272. *Actaea arguta*

15273. *Barbarea orthoceras*

15274. *Rhodiola rosea*

15275. *Tellina grandiflora*  
Petals greenish-white

15276. *Caltha biflora*

15277. *Polygonum bistatoides*

Aug. 10, 1939.

Stey High Valley, Marble Mts.,  
Siskiyou Co.

15278. *Aquilegia formosa*

15279. *Hackelia flourenda* 1

15280. *Mimulus Lewisii*

15281. *Carex gymnoclada*

15282. *Carex*

15283. *Phacelia procera*  
Corolla solid tan.

15284. *Veratrum californicum*

Between this & *V. viride* there  
were no hybrids seen at Stey High.  
But in vicinity of Big Elk Lake  
individuals were seen which I  
suspect of hybrid origin.

grindstone Camp, Canyon Creek Canyon,  
Marble Mts., Siskiyou Co. Aug. 10, 1939.

15285. *Ribes Lobbii*

Near mouth of Canyon Creek,  
Siskiyou Co. Aug. 11, 1939.

15286. *Ribes Roeglii* var. *cuculentum*

Scott River Canyon near mouth  
of Canyon Creek, Siskiyou Co.

Aug. 11, 1939.

15287. *Oxyanthus pilosus* var.  
*Bolanderi*.

15288. *Galium Bolanderi* form?

15289. *Galium pubens*

This and preceding growing within  
few feet of each other

Sulphur Works, Mt. Lassen,  
Shasta Co. Aug. 12, 1939.

- 1 15290. *Phacelia* ~~sp.~~ *sp.*  
Corolla campanulate, ~~pale~~ bluish-  
lavender.

- 1 15291. *Agrostis thymalis*

- 1 15292. *Panicum thymale*

- 1 Third Creek, 8500 ft., near  
Mt. Rose, Washoe Co., Nevada  
Aug. 13, 1939.

- 1 15293. *Rumex utahensis*

15294. *Cirsium* - cf. *utahense*

Flowers very pale pink at  
first.

15295. *Ribes lasianthum*

15296. *Macromena suffruticosa*.

Echo Summit on road to  
Pleasville, Eldorado Co.

Aug. 13, 1939.

15297. *Chenopodium albidum*

15298. *Rumex triangulivalvis*

Near Strawberry on road to  
Pleasville, Eldorado Co.

Aug. 13, 1939.

15299. *Phacelia nuttalliana*

Corolla tubular, pale lavender.

Riverton, Eldorado Co. Aug. 13, 1939.

15300. *Phacelia amurensis* <sup>var. *nutans*</sup>

Corolla solid whitish, closed-  
tubular in anthesis.

15301. *Lupinus albicanalis*

Flowers pinkish-lavender at  
first. Bushy plants ca 2 ft. tall.

Open clay hills 8 miles from  
Folsom on road to Placerville,  
Eldorado Co. (near Sacramento  
Co. line). Aug. 13, 1939.

15302. *Lesvingia nana*

The low gray-white plants with  
mauve flowers make a  
delicate but rather <sup>prominent</sup> colorful  
plant association on gentle  
slopes surrounded by dried  
grassland.

15303. *Aristida oligantha*.  
with preceding but - low places.  
Trees seen in vicinity of  
Spirit Lake, Marble Mts.

*Abies magnifica* - common

*Abies concolor* - rare

*Thuja Mertensiana* - common

*Pinus monticola* - not common

*Pinus ponderosa* - rare on S. slopes

*Libocedrus decurrens* - " " " "

*Picea Breweriana* - occasional.

At Sky High Valley, *Juniperus communis* and *Populus trichocarpa* were rare but not collected.

Mr. John F. Williams says that *P. albiculis* + *P. Murrayana* are rare eastward toward Shackleford Creek. Also some scattered individuals of *Pinus Balfouriana* which was seen + collected around Black Mt.

In the canyon of Canyon Creek there is a magnificent forest of Transition Zone trees. In addition to the usual *P. ponderosa*, *P. lambertiana*, *Libocedrus decurrens* and *Pseudotsuga taxifolia*, + *Abies concolor*, there was *Taxus brevifolia* + among the broad-leaved trees *Acer macrophyllum*, *Quercus Kelloggii* + *chrysolepis*, *Arbutus Menziesii*, *Alnus rhombifolia*, *Conus Nuttallii*.

Aug. 27, 1939.

Near station, Ross, Marin Co.

15304. *Rumex bolivifolius* Greene. Leaves small  
Stems low & spreading.

15305. *Rumex* ~~*laevifolius*~~  
Stems low and spreading.

15306. *Lapsana communis*

15307. *Medicago lupulina*

15308. *Atriplex hastata*

15309. *Chenopodium ambrosioides*  
*ssp. chilense*  
To 4 ft. tall. Odorous.

15310. *Chenopodium* <sup>*album.*</sup> ~~*ambrosioides*~~  
*subsp. chilense*

15311. *Digitaria sanguinalis*

Aug. 27, 1939.

On creek in Ross Valley, Marin Co.

15312. *Lemna*

Fronds large and very flat.

Bright yellowish-green.

Strand of Phoenix Lake, Marin Co.

15313. *Juncus*

15314. *Juncus phaeocephalus* var.  
— *paniculatus*

15315. *Eleocharis macrostachya*

15316. *Polygonum monspeliense*

15317. *Polygonum punctatum* m  
Also in springy places.

Submerged or floating, Phoenix Lake.

15318. *Potamogeton pectinatus*

15319. *Potamogeton nodosus*.

Aug. 27, 1939.

Dry slopes near Phoenix Lake,  
Maric. Co.

15320. *Cercocarpus betuloides*

15321. *Stephanomeria coccinea*

Between Phoenix Lake and  
Lake Lagunitas on Fish Grade,  
Maric. Co.

15322. *Quercus dumosa*

Two plants, one shrubby, the  
other arborescent and about 10 ft. tall.

15323. *Heulandya lasa*

On exposed rocks. Rostles glaucous.

Strand of Lake Lagunitas, Maric. Co.

15324. *Euphorbia serpyllifolia*

15325. *Eleocharis*

15326. *Dryanthes aragallidea*

15327. *Cypripedium humifusum*

Lagunitas Meadows, Marin Co.

15328. *Navarretia*

Upper part of Corte Madera Ridge,  
Marin Co. Aug. 27, 1939.

15329. *Symphoricarpos*  
Low trailing shrub.

Corte Madera Salt marshes,  
Marin Co. Sept. 3, 1939.

15330. *Grindelia humilis*

15331. *Spartina leucantha*

15332. *Chrysopsis oregana*

Along railroad fill, introduced?

Sept. 3, 1939.

Near Hamilton Field, Marin Co.

15333. *Trichostema*

Ignacio, Marin Co.

15334. *Bassia hyssopifolia*

Black Point, Marin Co.

15335. *Cistus villosus corsicus*

Naturalized on wooded slopes.

Near Black Point on road to  
Novato, Marin Co.

15336. *Hemizonia corymbosa*

15337. *Polygonum lapathifolium*

Near Novato, Marin Co.

15338. *Amaranthus gracilis*.

Erect, 1-2 ft. tall.

15339. *Amaranthus blitoides*  
Nearly prostrate

Sept. 3, 1939.

15340. *Amaranthus retroflexus*

15341. *Amaranthus hybridus*

15342. *Centaurea calcitrapa*.  
Erect, 2-3 ft.

15343. *Echinochloa crus-galli*.

San Antonio Creek at Marin-Sonoma  
Co. line n. of Novato, Marin Co.

15344. *Sorghum halepense*

15345. *Chenopodium album*

15346. *Urtica*

15347. *Salix humilis*

15348. *Mentha*

Sept. 3, 1939.

San Antonio Creek at Marin -  
Sonoma Co. line north of Novato,  
Marin Co.

15349. *Rosa*

15350. *Nicotiana*

15351. *Amaranthus blitoides*  
Stems prostrate.

15352. *Amaranthus californicus*  
Stems suberect in some small  
plants, mostly prostrate. In sand  
of creek-bed.

15353. *Euphorbia perfoliata*

Salt marsh at mouth of San  
Antonio Creek, Marin Co.

15354. *Achillea borealis*  
var. *californica*.

✓ Near  
Burdell  
Station.

Sept. 3, 1939.

15355. *Cuscuta subinclusa* 10.4 H.  
Parasitic on *Gudelia humilis*.

15356. *Cuscuta salina*  
Parasitic on *Juncus carnosus*

15357. *Rosa*  
Slope above San Antonio creek  
near preceding. Flowers very  
fragrant.

San Rafael, Marin Co.

15358. *Anemone deflexus* L.

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Stinson Beach, Sept. 10, 1939.

15359. *Cicuta Douglasii*  
Margin of brackish marsh.

15360. *Urtica holosericea*

15361. *Eriogonum nudum*

Lake Lagunitas, Marin Co.

Oct. 1, 1939.

15362. *Juncus phaeocephalus*

15363. *Callitriche Bolanderi*?

15364. *Ammannia coccinea*

15365. *Juncus Xiphoides*

Rocky bed of inlet to Lake Lagunitas,  
Marin Co. Oct. 1, 1939.

15366. *Holozornia filipes*

15367. *Canum Gairdneri*.

Phoenix Lake, Marin Co.

Oct. 1, 1939

15368. *Scirpus californicus*

Pt. San Pedro, San Mateo Co.

Oct. 8, 1939.

15369. *Staphanomeria* - *Ptiloria*  
*concolor*?

Strand of Alpine Lake, Marin Co.

Oct. 15, 1939.

15370. *Plantago*

15371. *Mollugo verticillata*

15372. *Rodivola curvisiliqua*

15373. *Amaranthus californicus*

15374. *Amaranthus californicus*.

Logunitas Creek below Alpine Dam,

Marin Co. Oct. 15, 1939.

15375. *Juncus Covillei*

Sily Lake, Fairfax road, Marin Co.

Oct. 15, 1939.

15376. *Juncus*

15377. *Verbena*

Fairfax limits on road to Alpine  
Lake, Marin Co., Oct. 15, 1939.

15378. *Stephanomeria virgata*?

Flowers conspicuous & large.

15379. *Stephanomeria* ~~conspicua~~

Flowers smaller. The two  
kinds not growing together - about  
 $\frac{1}{4}$  -  $\frac{1}{2}$  mile apart.

Jurlock, Stanislaus Co. Oct. 24-39.

15380. *Chenopodium strictum* Kras.

Tall plants common along highway  
becoming purplish-red. 2 to 6 ft. tall.

Nov. 5, 1939.

Salt marsh near Manzanita, Marin Co.

15381. *Atriplex hastata*

15382. *Atriplex hastata*

15383 *Atriplex hastata*

The 3 forms of *Atriplex* grew close together.

Along railroad tracks, Sausalito.

15384. *Rumex salicifolius*

15385. *Rumex salicifolius* frax.  
colla: 3

15386. *Cuscuta, solana* var. *major*  
Yunker.

15387. *Grindelia camporum*

San Geronimo Ridge in serpentine,  
Marin Co. Feb. 25, 1940.

15388. *Pedicularis densiflora* var.  
Corolla deep or rosy-pink except  
the lower lip which is white.  
Blade of leaves glabrous.

Rocky outcrop on ridge between  
Min Woods and Mill Valley, se.  
of Min Woods, Marin Co.  
Mar. 10, 1940.

15389. *Erysimum franciscanum*.

Wet soil, Logunitas Meadows,  
Marin Co. Mar. 17, 1940.

15390. *Isotria medeolae*

15391. *Lilaea subulata*

San Anselmo Canyon above Fairfax,  
Marin Co. Apr. 6, 1940.

15392. *Amsinckia*

Coral Hollow near Tesla,  
Alameda Co. Apr. 7, 1940.

15393. *Erodium macrophyllum*

Canyon n. of <sup>middle</sup> Coral Hollow at  
Alameda - San Joaquin Co. line,  
Apr. 7, 1940.

15394. *Salvia candracea*

15395. *Phacelia ciliata*

grassy slope on ridge south of  
cascades of San Anselmo Creek,  
Marin Co. Apr. 14, 1940.

15396. *Plantago truncata* ssp. *firma*.

Apr. 21, 1940.

Pine Canyon near "Castle Rock,"  
Mt. Diablo, Contra Costa Co.

15397. *Colobortus pulchellus*

Petals fringed & hairy to tip on  
inside, crossing each other about  
 $\frac{1}{4}$  -  $\frac{1}{2}$  below tip (i.e., the tips of  
petals not approximate). Bushy  
shaded slope.

15398. *Helianthella costana* Greene

15399. *Platitris*

15400. *Githopsis specularioides* Nutt.

15401. *Orobancha uniflora*

15402. *Minulus nautilus* Greene

15403. *Trifolium variegatum* Nutt.

15404. *Lionthes pygmaeus*

15405. *Luzia hieracioides* (DC.) H. & A.

15406. *Filago californica*?

15407. *Calandrinia*

Corolla shorter than calyx, apparently  
not opening. Shallow soil on  
sandstone strata. Apr. 21, 1940.

15408. *Avena barbata* Bert.

Lone Mt., San Francisco

May 11, 1940.

15409. *Avena fatua* L.

Lone Mt., San Francisco

May 11, 1940.

May 12, 1940.

Woods south of Lagunitas (Station)  
Marin Co.

15410. *Pyrola aphylla*

West end of San Geronimo Ridge  
above mouth of Big Caram Creek,  
Marin Co.

15411. *Cirsium quercetorum*

In anthesis corolla spreading, white  
becoming sodid.

15412. *Cryptantha Torreyana calistogae*

Canyon of Lagunitas Creek between  
Big & Little Caram creeks, Marin Co.

15413. *Anemone Grayi*

15414. *Allocarya*

15415. *Equisetum arvense*

Rather common in wet places.

May 12, 1940.

15416. *Equisetum maximum*

Occasional leafy stems bearing  
strobili.

15417. *Mimulus*

Lower lip of corolla with brown eye.

Calyx sharply carinate, lower teeth  
up-turned.

15418. *Ranuncoffia*

15419. *Amelanchier*

15420. *Godetia anserina*

Buds drooping.

15421. *Heterocodon*

15422. *Pyrola aphylla*

15423. *Lathyrus Bolanderi*

May 12, 1940.

"Chianti country" between Little  
Carran and Carran Ridge, Minn. Co.

15424. *Lathyrus Torreyi*

Herbage fragrant in drying.

15425. *Streptanthus* <sup>1</sup>*pulegioides*

On serpentine. Flowers dark  
purplish, decidedly recurved.

15426. *Vicia exigua*

15427. *Stipa lepida*

15428. *Apiastrum angustifolium*

15429. *Thelypodium lasiophyllum*

15430. *Melica Torreyana*

15431. *Silene aitchisoni*

15431A. *Cryptantha Torreyana* Colistogon

May 12, 1940.

South end of Caram Ridge east  
of Little Caram Falls, Marin Co.

15432. *Mertensia eximia*

Serpentine area. Corolla bright pink

15433. *Convolvulus*

with prouding.

15434. *Ceanothus japonicus*

Low bushes about 1 ft. high. Hairs  
wrinkled & variously cleft on sides.

15435. *Mimulus*

West Fork of San Anselmo Canyon,  
Marin Co.

15436. *Delphinium hesperium*

15437. *Habenaria unalaschensis*

San Anselmo Canyon above Fairfax,  
Marin Co. May 12, 1940.

15438. *Trifolium* *pratense*

15439. *Lupinus* *densiflorus*

1. Flowers very pale yellow.

15440. *Phacelia*

corolla whitish (no lavender)

1. becoming solid tan.

15440A. *Castilleja*

1. Fairfax, Marin Co. May 12, 1940.

15441. *Convolvulus*

15442. *Bromus* *carinatus*

May 19, 1940.

Napa Valley near Napa, Napa Co.

15443. *Cichorium Intybus*

Leaves from large basal rosette.

Near Calistoga, Napa Co.

15444. *Phalaris californica*

15445. *Agrostis exarata*.

Along the trail from "Monteale", the  
N.B. Livermore place, to the "Cater  
Country" e. of Mt. St. Helena, near  
St. Helena Creek, Napa Co.

15446. *Amelanchier subintegra*

In flower. Leaves small subentire

15447. *Amelanchier alnifolia*

In young fruit. Leaves larger &  
conspicuously dentate. This form  
not as common.

May 19, 1940.

Upper St. Helena Creek s. of  
"Montesol" (see preceding), Napa Co.  
15448. *Melica Geyeri*.

15449. *Minulus nasutus*.

Leaves much incised or divided

15450. *Ribes Greeneianum*

A few bushes along creek in  
shade.

On the headwaters of St Helena  
Creek in the "Cater Country" s.  
of Mt. St. Helena, Napa Co.

15451. *Drillaria Purdyi*

Capitate subglobose, not angled.

15452. *Minulus Kelloggii*

15453. *Streptanthus glandulosus*

May 19, 1940.

15454. *Minulus cleistogamorus*

The cleistogamorus *minulus* that brought me here! Discovered two two weeks ago by Maxine Wilkes & Paul Cherniack of the Sierra Club Nature Study Group while Miss Wilkes was collecting seeds for the collection at the Ferry-Morse Seed Laboratory. The little plants grow on a rocky hillside around volcanic boulders & outcrops and are more conspicuous in fruit when the accrescent calyx is striped with reddish-purple lines that were the <sup>shaggy</sup> carinate folds of the calyx in anthesis.

*Medea nutans* was common in the vicinity.

15455. *Streptanthus* = 15453.

Sepals black-purple.

May 19, 1940.

Upper St. Helena Creek n. of  
"Montesol", Napa Co.

15456. *Phacelia* ~~serotina~~  
<sup>ssp. *intermedia*</sup>  
Corolla open - or tubular -  
campanulate at anthesis, the  
lobes turning in as the corolla  
withers.

15457. *Phacelia*

15458. *Layia elegans*.

15459. *Leianthus dichotomus*  
Corolla open in middle of day in  
bright hot sun. Mouth of corolla  
greenish.

The following were collected from  
flats nearby. Rock volcanic ash.

15460. *Calyptidium quadrupetalum*

May 19, 1940.

15461. *Minulus Rathbani* Laynear  
15462. *Navarretia subuligera*  
15463. *Zygadenus micranthus*  
15464. *Scibneria Bolanderi*.  
15465. *Minulus angustatus*  
15466. *Polygonum Parryi*.

On road cut between "Montesol"  
& St. Helena Creek in serpentine  
elapomul, May 19, 1940.

15467. *Cirsium*

Corolla white. Numerous young  
rosettes on bank appearing as if  
from rootstocks but no branching  
seen in specimens dug, though some  
appear to have nodes.

May 20, 1940.

Trip with Mr. Pennell to Pt. Reyes

Shaley outcrops Fairfax, Marin Co.

15468. *Lupinus formosus*

Stems low + sprawling. Corolla  
deep lavender or bluish being solid.

15469. *Agoseris plebeia*.

Leaves glabrous

15470. *Agoseris plebeia*

Leaves puberulent. growing  
with the preceding.

15471. *Agoseris hirsuta*.

15472. *Juncus phaeocephalus*  
var. *paniculatus*

May 20, 1940.

Rocky shale outcrop east of  
Logunitos (village), Marin Co.

15473. *Phacelia*

Corolla white, becoming soiled,  
open - campanulate, the lobes not  
much inflexed in withering but  
somewhat involute.

Papenmill Creek w. of Logunitos,  
Marin Co.

15474. *Cicuta Douglasii*

Near Jocaloma, Marin Co.

15475. *Trifolium flavulum*

15476. *Trifolium variegatum*

15477. *Trifolium micraden*

15478. *Stachys*

May 20, 1940.

Near Tualuma, Marin Co.

15479. *Minulus*

Throat not closed by palate.

15480. *Lupinus densiflorus*

Robust plants with lower stem  
peduncle-like, bearing at top a  
whorl-like development of leaves +  
branches. Flowers pale yellowish to  
lavender.

15481. *Castilleja*

15482. *Amaranthus*

Corolla golden yellow without  
mottling.

Olama, Marin Co.

15483. *Lupinus carnosus* Greene

Topotype! - Inflorets too small!

May 20, 1940.

Inverness, Marin Co.

15484. *Scrophularia*

The coastal pubescent form, which, according to Mr. Pennell, does not occur inland. He did not find it today east of San Andreas Fault.

15485. *Alnus rubra*

15486. *Stachys*

15487. *Ribes Menziesii*

15488. *Rumex occidentalis* var. *procerus*

15489. *Plantago*

In salt marsh

May 20, 1940.

Near radio station (Pt. Reyes P.O.),  
Pt. Reyes, Marin Co.

15490. *Trifolium amplexans*

15491. *Equisetum Kansanum*  
(Det. Conrad Matern)

15492. *Stachys*

Corolla rosy-pink, mottled.

Marshy place along road not  
far north of the point, Pt. Reyes  
Peninsula, Marin Co.

15493. *Limnanthus sulphurea*

Corolla clear yellow with veins a  
little deeper.

15494. *Radicula curvisiliqua*

May 20, 1940.

Rocky slopes near lighthouse,  
Pt. Reyes, Marin Co.

15495. *Phacelia*

15496. *Fritillaria lanceolata* var. *tristylis*  
Fruit with broad thin wings.

15497. *Pentstemon californicus*  
Flowers smaller, fruit smoother hairy.

15498. *Pentstemon californicus*  
Flowers larger, fruit hairy.

15499. *Lupinus eximius*  
Flowers lavender-blue.

15500. *Heliphium decorum*  
7 stamens not at all united

15501. *Ranunculus californicus*  
var. *concolor*

May 20, 1940.

Near the lighthouse, Pt. Reyes,  
Marin Co.

15502. *Trifolium* ~~monacum~~.

15503. *Calandrinia ciliata* var.

~~Menziesii~~  
15504. *Trifolium barbigerrum*

15505. *Trifolium Willdenovii*

15506. *Trifolium microdon*

15507. *Trifolium gracilentum*.

15508. *Medicago arabica*.

15509. *Lupinus bicolor umbellatus*.  
Flowers deep blue

15510. *Thelypodium laeophyllum*

May 20, 1940.

15511. *Amanschia*

15512. *Orthocarpus*

15513. *Nemophila*

Corollas with dots & lines or only dots, sometimes nearly white, at other times light blue.

15514. *Stoebeys*

15515. *Castilleja*

Spikes yellow. Growing with red variety and hybridizing with it.

15516. *Lathyrus Bolanderi*

(Dr. Pennell & I also went to Tiburon where he collected *Castilleja neglecta*.)

Stone Dam near Lake Palaritos,  
San Mateo Co. May 23, 1940.

15517. *Nemophila*

15518. *Romanzoffia*

Plants with numerous bulbs in  
leaf-axils.

Southern ridge in San Anselmo  
Canyon above Fairfax, Marin Co.  
May 26, 1940.

15519. *Cirsium*

Plants appearing like winter annual  
although one small depauperate  
seedling was seen that might be in  
flower a year hence if it survives  
the summer dryness & heat. Flowers  
deep rose-red, the outermost  
ones spreading a little.

15520A. *Plantago firma*

15520. *Cirsium*

Plants perennial, probably from underground stems since there is quite a colony of young leaf-rosettes. Flowers creamy-white & somewhat faded, fading darker, the outermost opening a little.

15521. *Lupinus marianensis*

Stems arising from perennial base. Flowers lavender-blue, fading to brownish early.

15522. *Helphinium hesperium*.

15523. *Phacelia*

Corolla open - campanulate at anthesis, contracting in age as it withers.

15524. *Campanula rotundifolia*

May 26, 1940.

Southern ridge in San Anselmo  
Canyon, Marin Co.

15525. *Quercus garryana*.

Sterile shrubs 5-7 ft. tall  
in the chaparral. The only oaks  
seen in the vicinity are *Q. muhlenbergii*,  
*Q. wislizenii* and *Q. dumosa*. Perhaps  
this is scrub form of *Q. garryana*.

Little Canon Falls, Marin Co.

15526. *Hedeoma*

15527. *Eschscholtzia californica* <sup>disseminated</sup>

15528. *Orthocarpus lithospermoides*

15529. *Arenaria Douglasii*

15530. *Euxylophos*

15531. *Envolvulus*

May 26, 1940.

15532. *Zygadenus fontanus* Nutt.

15533. *Lilanthus*

15534. *Trifolium albopurpureum*

15535. *Carex menziesiana*

15536. *Mimulus*

15537. *Carex subbracteata*

15538. *Cryptantha*

15539. *Lomatium intricatum*

15540. *Gilia*

15541. *Cryptantha*

15542. *Gilia*

May 26, 1940.

Little Carson Falls, Marin Co.

15543. *Modiola*

Smells like black walnut.

Between Little Carson Falls and  
south end of Carson Ridge, Marin Co.

15544. *Lupinus collinus*

15545. *Amsinckia*

15546. *Equisetum kanadense*

15547. *Linanthus*

Limb white or lavender-maroon.

San Anselmo Canyon above  
Fairfax, Marin Co.

15548. *Ribes californicum*

In granitic sand at top of  
Nevada Falls, Mariposa Co.

May 30, 1940.

15549. *Phacelia*

Sandy soil, floor of Yosemite  
Valley near Mirror Lake;  
Mariposa Co. May 31, 1940.

15550. *Carex Brewsterii*

Gravel from disintegrating granite,  
El Capitan Trail west of Ribbon Creek,  
Mariposa Co. May 31, 1940.

15551. *Lewisia yosemitana*

Sepals 2, glandular-denticulate,  
nearly plane, subtended by 2 <sup>bracts</sup> similar  
in texture but sharply carinate and  
narrower. Petals 7 or 8, denticulate  
at apex, united at base  $\frac{1}{3}$  length,  
light pink above the middle. Stamens  
17 or 18. Style branches 4, stigmatic.

May 31, 1940.

for whole length on inner side,  
 $\frac{1}{2}$  as long as the undivided part  
to nearly as long. Peduncle a  
little flattened, jointed at very  
base. — The leaves form a pretty  
gray-green rosette, the petioles  
are buried in the gravel.

15552. *Lewisia triflylla*

15553. *Phacelia*

Corolla open, campanulate (✓)

light violet. Herbage staining paper  
brownish.

15554. *Dicentra uniflora*

June 1, 1940.

Miner Lake, Yosemite Valley  
Mariposa Co.

15555. *Galium Bolanderi*

Angles of stems smooth & glabrous.

15556. *Galium pubens* var. *scabridum*

Angles of stems hirsutulous.

15557. *Galium pubens* var. *scabridum*

Angles of stem scabrous.

These three *Galium*s were growing  
together.

15558. *Phacelia* ~~sp.~~

Corolla tubular - campanulate, the  
lobes erect or a little spreading,  
white. Plants perennial but  
apparently rather short lived since  
none is very large.

June 1, 1940.

Snow Creek Trail in Inyo  
Canyon, ca 5500 ft. elev.,  
Mono Co.

15559. *Minulus laciniatus*

15560. *Placelia*

Similar to No. 15558 but this  
with somewhat narrower sepals  
and lavender or lavender-tinged  
corolla.

15561. *Collinsia tinctoria*

Corolla mostly lavender.

var. *acutidens*

15562. *Galium pubens* A. ♀ + ♂

Corolla of ♂ flowers reddish.

15563. *Placelia* — <sup>*vallida*</sup> + 15563A !

Size of plants & lobing of leaves  
variable. Lobes of calyx sometimes  
quite oblique & unequal. Stamens

sometimes included, generally a  
little exserted.

*capillaris*

15564. *Juncea* <sup>^</sup> (*Brachystylus* (Engelm.) Piper)

In moss on granite slope over which  
water trickles.

15565. *Scribneria Blandieri*.

With prouding.

15566. *Kumlienia hystericula* (Gr.) Gr.

Petals green nectaries.

15567. *Garrya Fremontii*

15568. *Thysanocarpus curvipes*

15569. *Amelanchier alnifolia*

Petals frequently veined with rose.

June 1, 1940.

Near top of zig-zag on Snow  
Creek Trail, Mariposa Co.

15570. *Quercus chrysolepis*

15571. *Quercus vaccinifolia*

These two oaks were shrubby  
and about 6-8 ft. tall. They grew  
next to each other!

15572. *Carex brevifolia*

Sand on granitic flat west  
of Mt. Watkins ridge, Mariposa  
Co.

15573. *Lewisia disepala*

In fruit the flower-breaks from  
the peduncle, the two sepals  
open out like two sheets, the  
corolla and top of ovary break off  
near base, allowing the remainder  
to blow about over the granitic

and distribute seeds.

15574. *Lewisia yosemitana*

Whereas the preceding is now in fruit this species has scarcely begun to bloom, only two plants with open flowers being found.

Near highest part of Mt. Walker's ridge where snow has just melted, Mariposa Co.

15575. *Lewisia discipala*

Sepals 2; petals 8, rosy-pink; stamens 12; stigma 4-parted.

Even on this height most of the flowers were past but two groups of plants in flower were found, one where the ground was just thawed, the other about 25 ft. from a rapidly melting snow bank.

Snow Creek Trail west of Mt.

Watkins, Mariposa Co. June 1, 1940.

15576. *Arabis repanda*.

Sepals bronzy, petals tinged with  
reddish brown.

15577. *Nemophila spathulata*

East end of Yosemite Valley between  
Happy Isles + Mirror Lake, June 2, 1940

15578. *Carex* *Whitneyi*

15579. ~~*Fedusia*~~ *pacifica*

15580. *Asarum Lemmonii*

In wet shaded place at Iron  
Spring.

June 9, 1940.

Northern part of Tiburon Peninsula,  
Marin Co., on slopes above bay.

15581. *Thibaudia*

15582. *Lupinus formosus*

15583. *Phacelia*

Cracks between, open - compound.

15584. *Centaurium*

15585. *Centaurium*

The two species of *Centaurium* were  
growing together.

June 29, 30, 1940.

15586. *Asclepias Kotels*

Very valley flats, Middletown,  
Lake Co. June 29, 1940.

15587. *Ceanothus integrifolius* f.

Shrubs 6-8 ft. tall on Cobb Mt.  
road from Middletown to Adams  
Springs, Lake Co. June 29, 1940.

15587A. *Quercus Douglarii* - Cobb Mt.

Soda Bay, Lake Co.

June 30, 1940.

15588. *Galium Nuttallii*

The ripe juicy fruits violet.

15589. *Styrax californicus*

15589A. *Ptelea cuneolata*

15590. *Ammannia coccinea*

15591. *Eriogonum vinivum*

15592. *Agoseris apargioides*?

15593. *Navaretia atrotyloides*

15594. *Juncus*

15595. *Sparganium eurycarpum*  
Robust plants 3-4 ft. above water  
along margin of Clear Lake.

Between Soda Bay and  
Kelseyville, Lake Co.

June 30, 1940.

15596. *Oithrocarpus lithospermoides*

15597. *Eryngium aristulatum*.

15598. *Scorzonella procera*.

The following collections  
were made on my vacation,  
spent this year with the Sierra  
Club at their camp at East  
Lake, Tulare Co., July 28 - Aug. 12.  
Certainly, I would say, the first  
"Base Camp Trip" was an over-  
whelming success botanically!

Canyon of S. Fork Kings River  
between Cedar Grove and  
Zinnwald Meadows, Fresno Co.  
July 27, 1940.

15599. *Equisetum hiemale*  
*californicum*

15600. *Cercocarpus intricatus*

Canyon of S. Fork of Kings River  
between Zinnwald Meadows and  
mouth of Bubbs Creek, Fresno Co.  
July 28, 1940.

July 28, 1940.

15601. *Rhamnus rubra* ssp.

*yosemitana*

15602. *Cornus californica*

15603. *Eriogonum sparganum*

15604. *Botrichium californicum*

Bulbo Creek Zigzags (Trail) at east  
end of Kings River Canyon, Fresno Co.

15605. *Rubus leucodermis*

15606. *Phoradendron villosum*.

On *Quercus chrysolepis*

15607. *Quercus chrysolepis*

15608. *Arctostaphylos Manryana*

15609. *Galium pubens* var.  
*scabidum*

July 28, 1940.

15610. *Zauschneria latifolia*

15611. *Chenopodium Fremontii*

15612. *Solidago californica*

15613. *Gnaphalium diffusum*

El. ca. 6200 ft.

A Bubba Creek Canyon near  
mouth of Sphinx Creek, Fresno Co.

15614. *Lupinus Pavonii*

15615. *Lotus americanus*

15616. *Quercus Kelloggii*

15617. *Codylanthus rigidus* var.  
*brevibaccatus*

15618. *Rubus nutkanus* var.  
*velutinus*

15619. *Ceanothus cordulatus*

July 28, 1940.

15620. *Symphoricarpos acutus*.

15621. *Ribes Roeslii*

15622. *Potentilla glandulosa* var.  
*Wangelliana*.

15623. *Hesperania californica*

15624. *Gnaphalium diffusum*

15625. *Gnaphalium diffusum* *villosum*  
Stems and leaves pubescent

15626. *Phacelia ramosissima*

15627. *Ceanothus integrifolius*  
var. *californicus*

15628. *Arctostaphylos patula*

15629. *Gnaphalium microcephalum*

July 28, 1940.

15630. *Gilia gilvipes*

15631. *Arabis repanda*.

15632. *Equisetum hyemale*  
*californicum*

15633. *Panicularia elata*

15634. *Equisetum arvense*

15635. *Silene vesicaria* var.  
*platylocha*

15636. *Potentilla gracilis* Elmeri.

15637. *Gayophytum lasiocarpum*.

15638. *Hieracium albiflorum*

15639. *Holodiscus discolor* var.  
*microphyllus*.

15640. *Habenaria unalaschensis*

July 28, 1940.

15641. *Lotus Douglasii* var.  
*nevadensis*
15642. *Geranium incisum*
15643. *Lotus oblongifolius* var.  
*Torreyi*.
15644. *Lotus crassifolius*
15645. *Scirpus microcarpus*
15646. *Artemisia tridentata*
15647. *Ribes nevadense*.
15648. *Sambucus glauca*.
15649. *Eriogonum nudum* var.  
*deductum*.
15650. *Apocynum nudum*
15651. *Pterospora andromedea*

July 28, 1940.

15652. *Galium sparsiflorum* ♀  
15653. *Galium sparsiflorum* ♂  
15654. *Galium pubens* var. *serotidum*  
Similar to No. 15609 but lower  
and more tufted.

Bubbs Creek Canyon below  
Charlotte Creek, Fresno Co.

15655. *Brodiaea elegans*  
15656. *Antennaria discolor* ?  
15657. *Angelica lineariloba*  
15658. *Mimulus Tilingii*  
15659. *Collinsia tinctoria*.  
15660. *Oxyopsis occidentalis*

July 28, 1940.

15661. *Erigeron foliosus*

15662. *Rumex solicifolius*

15663. *Pallaea compacta*

15664. *Solidago elongata*

15665. *Madia gracilis*

15666. *Erysimum capitatum*

15667. *Cuscuta subinclusa*.

15668. *Artemisia discolor*.

15669. *Thalictrum Fendleri*.

15670. *Stachys albens juliensis*

15671. *Rhamnus rubra yosemite*

15672. *Urtica holosericea*

15673. *Lilium pardalinum* var.  
*parviflorum*

Bubba Creek Canyon at Charlotte  
Creek, Fresno Co. July 29, 1940.

15674. *Acenthobium campylopodium*

15675. *Lupinus Parishii*

15676. *Aconitum columbianum*

Bubba Creek Canyon between  
Charlotte Creek and Junction Meadows,  
Fresno Co., July 29, 1940.

15677. *Grapholisa margaritacea*

15678. *Eupatorium occidentale*

15679. *Symphoricarpos Parishii*

July 29, 1940.

15680. *Oreostaphylos patula* var.

15681. *Antennaria discolor*.

15682. *Stephanomeria tenuifolia*

15683. *Chrysopsis Buereri*.

15684. *Antennaria glauca* ?

Junction Meadow, Fresno Co.

15685. *Botrychium californicum*

15686. *Lilium pardalinum* var.  
*paviflorum*

15687. *Acer glabrum*

15688. *Eriogonum foliosum*

July 30, 1940.

Rocky dry western slope on  
east side of East Lake, Tulare Co.

Antennaria tridentata common.

15689. Ribes montigenum.

15690. Eriogonum nudum deductum  
Scapigerous + branched forms together

15691. Erysimum capitatum

15692. Antennaria discolor.

15693. Symphoricarpos Parishii

15694. Holodiscus discolor var.  
microphyllus.

15695. Carex Hordii

15696. Salix Lemmonii.

15697. Hemerocallis Richardsonii  
ssp. viscosa

July 30, 1940.

15698. *Juniper*

15699. *Thalictrum fendleri*.

15700. *Thalictrum sparsiflorum*.

15701. *Senecio Fremontii* var.  
*occidentalis*

15702. *Sitanion Hystrix*

15703. *Smilacina amplexicaulis*  
var. *glabra*

15704. *Lonicera involucrata*.

15705. *Sambucus racemosa*

15706. *Aquilegia pubescens*

15707. *Aquilegia formosa*

Flowers smaller & redder. This  
and preceding growing together.

July 30, 1940.

15708. *Phacelia heterophylla* var.

This seems to be like the plant collected by Mrs. Bradegee at Little Meadows (?) that was included by Brand in his *Phacelia magellanica* f. *griseophylla*. - This East Lake plant is a perennial, short-lived perhaps, with flowers in subglobose heads, corollas open-composite, lavender.

15709. *Stipa occidentalis*

Moist meadows + drier flats at north end of East Lake, Tulare Co.

15710. *Bromus carinatus linearis*

15711. *Agropyron Smithii*

15712. *Antennaria rosea*

July 30, 1940.

15713. *Erigeron Coulteri*

15714. *Antennaria corymbosa*

15715. *Equisetum arvense*

15716. *Geranium incisum*

15716A. " *Richardsonii*

15717. *Potentilla glandulosa* Lockman

15718. *Geum macrophyllum*

15719. *Mitella Breweri*.

15720. *Epilobium glandulosum*?

15721. *Stellaria longipes*

15722. *Luzula*

15723. *Penstemon confertus* var.  
purpureo-caeruleus.

July 30, 1940.

15724. *Fragaria virginiana* var.  
*platyphylla* petalo

15725. *Stipa Tetanaria*.

15726. *Sisyrinchium idahoensis*

15727. *Eriogonum leucophyllum*

15728. *Sisyrinchium Elmeri*.

15729. *Pedicularis attolensis*

15730. *Habenaria Bigelovii*

15731. *Habenaria leucostachys*

15732. *Gentiana holopetala*

15733. *Carex Gardneri*

15734. *Allium validum*

July 30, 1940.

15735. *Suaeda perennis* obtusa

Flower parts usually in 5's,  
occasionally in 4's on same  
plant. Petals <sup>light</sup> bluish-purple.

15736. *Habenaria sparsiflora*

15737. *Cirsium thummondii*

15738. *Cirsium thummondii*

These two collections seem to  
represent two growth-forms of  
the same species - one caulescent,  
the other distinctly caulescent. In  
each the heads are clustered at  
the axillae are lavender-pink.

Examination of young plants would  
seem to indicate that the plants  
only bloom once and are from  
more or less thickened roots which  
live several years before the time of  
blooming is reached.

July 30, 1940.

15739. *Carex heteronema*

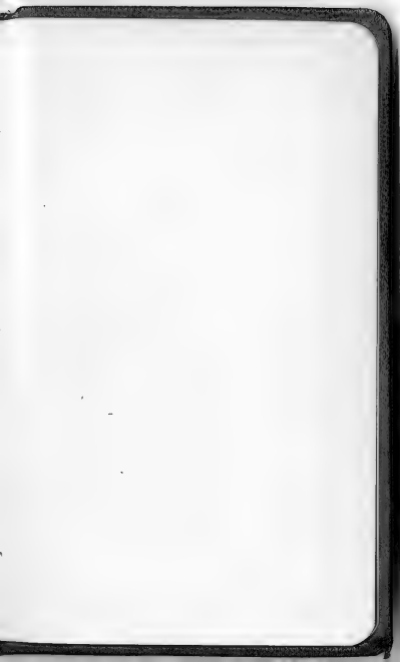
15740. *Carex abrupta*

15741. *Carex vicariorum*

15742. *Carex lanuginosa*

15743. *Carex Lemmonii*

15744. *Carex Kelloggii*



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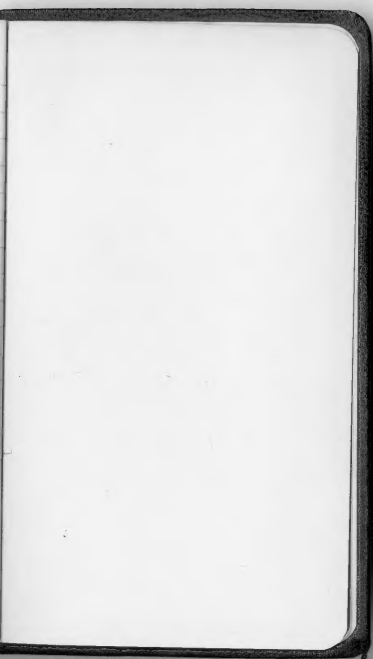
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B&PNº 3810½

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